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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,490	03/16/2004	Frank van Diggelen	GLBL 047	1217
54698	7590	03/16/2006		
RAYMOND R. MOSER JR., ESQ. MOSER IP LAW GROUP 1040 BROAD STREET 2ND FLOOR SHREWSBURY, NJ 07702			EXAMINER MULL, FRED H	
			ART UNIT 3662	PAPER NUMBER

DATE MAILED: 03/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/801,490

Applicant(s)

DIGGELEN ET AL.

Examiner

Fred H. Mull

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 8-10 and 17-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Ultimate parent claim 1 recites the limitation:

“computing update data for said initial time-of-day using a mathematical model relating said pseudoranges, said expected pseudoranges, and said line-of-sight data”.

It is unclear how bit transition time-of-day determination uses said pseudoranges and said expected pseudoranges. The line-of-sight data would be used to acquire the satellites, but the bit transitions are determined without determining measured pseudoranges or expected pseudoranges.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Fuchs.

In regard to claims 1-2, 7-12, and 16-21, Fuchs discloses:

obtaining expected pseudoranges to a plurality of satellites (265, Fig. 5; col. 4, lines 35-41), said expected pseudoranges based on an initial position (250) of said mobile receiver and an initial time-of-day (502);

obtaining expected line-of-sight data to said plurality of satellites (col. 10, lines 61-67);

measuring pseudoranges from said mobile receiver to said plurality of satellites (504); and

computing update data for said initial time-of-day using a mathematical model relating said pseudoranges, said expected pseudoranges, and said line-of-sight data (col. 11, lines 55 to col. 12, line 56).

In regard to claims 3 and 13, Fuchs discloses receiving acquisition assistance data at said mobile receiver from a server; wherein said expected pseudoranges and said expected line-of-sight data are obtained from said acquisition assistance data (col. 10, lines 61-67).

In regard to claims 4-6 and 14-15, Fuchs further discloses measuring pseudorange rates at said mobile receiver; obtaining almanac data; and computing an approximate position of said mobile receiver using said pseudorange rates and said almanac data; wherein said expected line-of-sight data is obtained in response to said approximate position and said almanac data (col. 4, lines 35-46; col. 15, lines 10-53).

3. Claims 1-2, 7-12, and 16-21 are rejected under 35 U.S.C. 102(b) as being anticipated by IDS document Sheynblat (Detailed Description embodiment).

In regard to claims 1-2, 7-11, and 16-21, Sheynblat discloses:

obtaining expected pseudoranges to a plurality of satellites (col. 5, line 53), said expected pseudoranges based on an initial position (col. 5, lines 63-64) of said mobile receiver and an initial time-of-day (col. 6, lines 1-2);

obtaining expected line-of-sight data to said plurality of satellites (col. 5, lines 55-56);

measuring pseudoranges from said mobile receiver to said plurality of satellites (col. 5, line 53); and

computing update data for said initial time-of-day using a mathematical model relating said pseudoranges, said expected pseudoranges, and said line-of-sight data (col. 5, line 42 to col. 6, line 15).

In regard to claim 12, Sheynblat further discloses a clock circuit; wherein said processor is further configured to calibrate said clock circuit using said update data (col. 5, lines 63-65).

4. Claims 1-2, 7-12, and 16-21 are rejected under 35 U.S.C. 102(b) as being anticipated by IDS document Sheynblat (Background embodiment).

In regard to claims 1-2, 7-11, and 16-21, Sheynblat discloses:

obtaining expected pseudoranges to a plurality of satellites (col. 2, line 11), said expected pseudoranges based on an initial position (col. 2, lines 17-18) of said mobile receiver and an initial time-of-day (col. 2, lines 17-18);

obtaining expected line-of-sight data to said plurality of satellites (col. 2, lines 13-14);

measuring pseudoranges from said mobile receiver to said plurality of satellites (col. 2, lines 10-11); and

computing update data for said initial time-of-day using a mathematical model relating said pseudoranges, said expected pseudoranges, and said line-of-sight data (col. 1, line 62 to col. 2, line 54).

In regard to claim 12, Sheynblat further discloses a clock circuit; wherein said processor is further configured to calibrate said clock circuit using said update data (col. 2, lines 50-54).

5. Claims 1-3, 7-13, and 16-21 are rejected under 35 U.S.C. 102(b) as being anticipated by van Diggelen '801.

In regard to claims 1-2, 7-12, and 16-21, van Diggelen discloses:

obtaining expected pseudoranges to a plurality of satellites (308; col. 6, lines 41-48), said expected pseudoranges based on an initial position (206) of said mobile receiver and an initial time-of-day (202);

obtaining expected line-of-sight data to said plurality of satellites (310; col. 8, lines 36-43);

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measuring pseudoranges from said mobile receiver to said plurality of satellites (204); and

computing update data for said initial time-of-day using a mathematical model relating said pseudoranges, said expected pseudoranges, and said line-of-sight data (216, 218, 220; col. 5, lines 44-49).

In regard to claims 3 and 13, van Diggelen discloses receiving acquisition assistance data at said mobile receiver from a server; wherein said expected pseudoranges and said expected line-of-sight data are obtained from said acquisition assistance data (col. 5, line 63 to col. 6, line 48; col. 8, lines 28-43).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred H. Mull whose telephone number is 571-272-6975. The examiner can normally be reached on Monday through Friday from approximately 9-5:30.

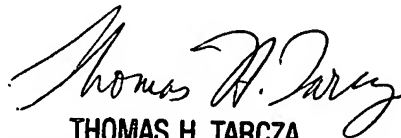
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas H. Tarcza can be reached on 571-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Fred H. Mull
Examiner
Art Unit 3662

fhm


THOMAS H. TARCZA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600